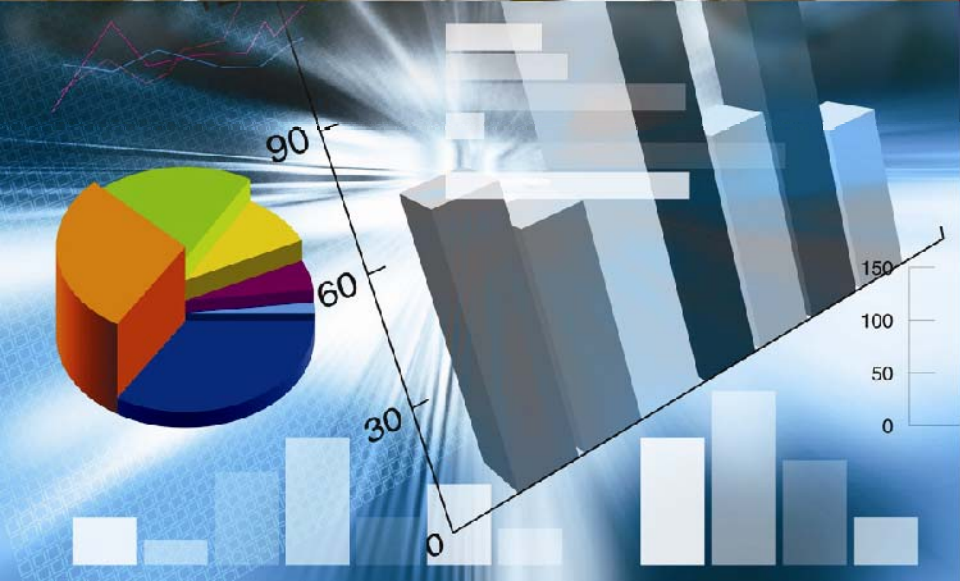


# ***Prevention Science and Adolescent Problem Behavior: Advances and Opportunities***

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# ***Prevention Science and Adolescent Problem Behavior: Advances and Opportunities***

- Trends in childhood and adolescent problem behavior
- The origins and evolution of prevention
  - Early strategies
  - Risk, protection, and public health models
  - Prevention science
- Advances in prevention: Illustrations from two longitudinal studies
  - The *Youth Matters* Prevention Trial
  - The *Bridge Project*: An Urban After-School Program
- Advances and research opportunities in prevention science





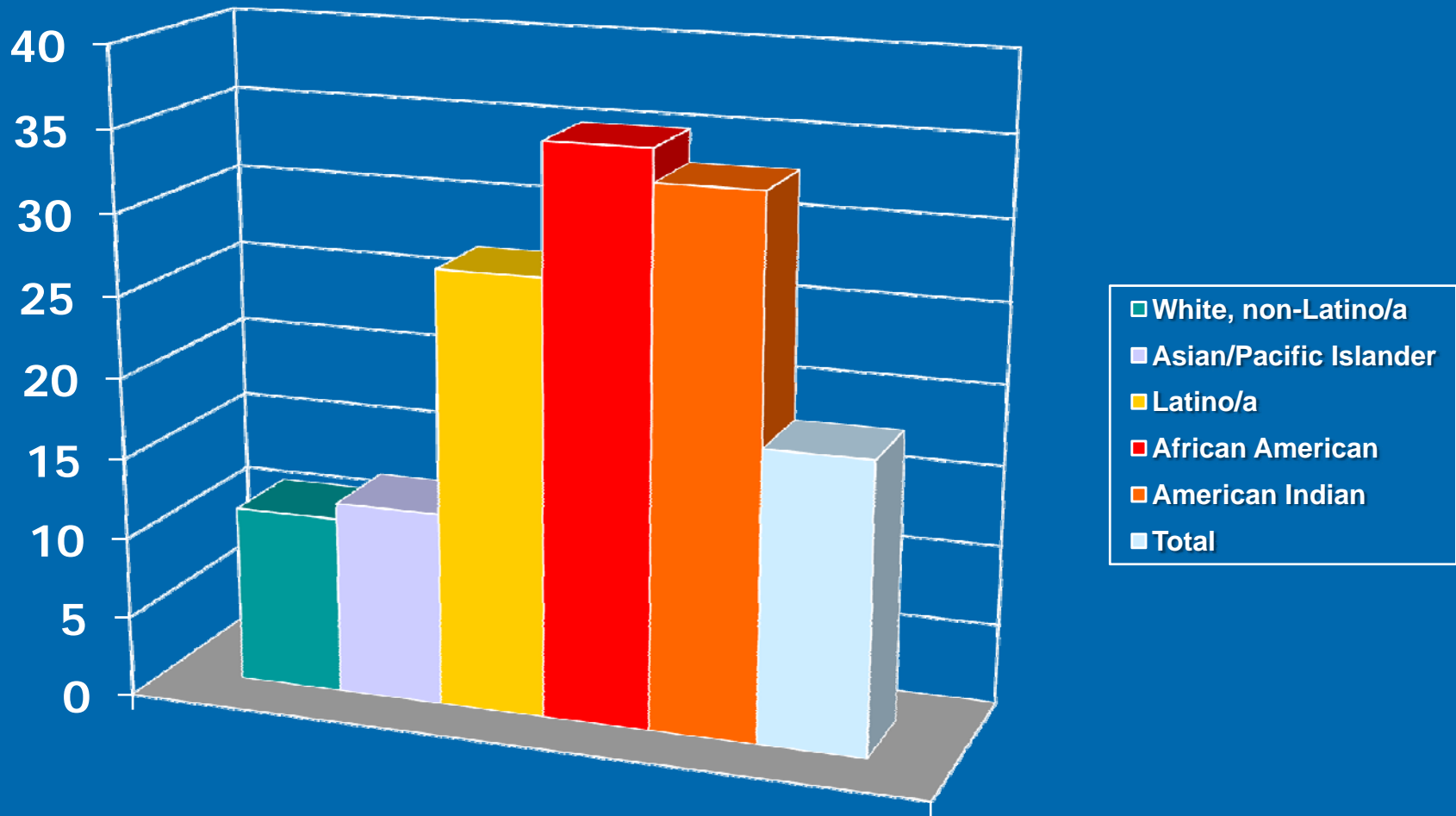
# ***Prevention Science and Adolescent Problem Behavior: Advances and Opportunities***

## **PART I *Trends in Childhood and Adolescent Problem Behavior***

# Current and Historical Patterns of Childhood and Adolescent Behavior

- Indicators assessing the health of America's children and youth reveal both positive news and challenging trends
  - Positive trends
    - Certain problem behaviors have decreased in the past decade
    - Rates of volunteerism and interest in civic engagement have increased
  - The challenges
    - Many young people experience significant individual, family, social, and environmental adversity
      - Exposure to adversity varies considerably by gender, race, ethnicity, and sexual orientation
    - Unacceptably high levels of some problem behaviors persist over time

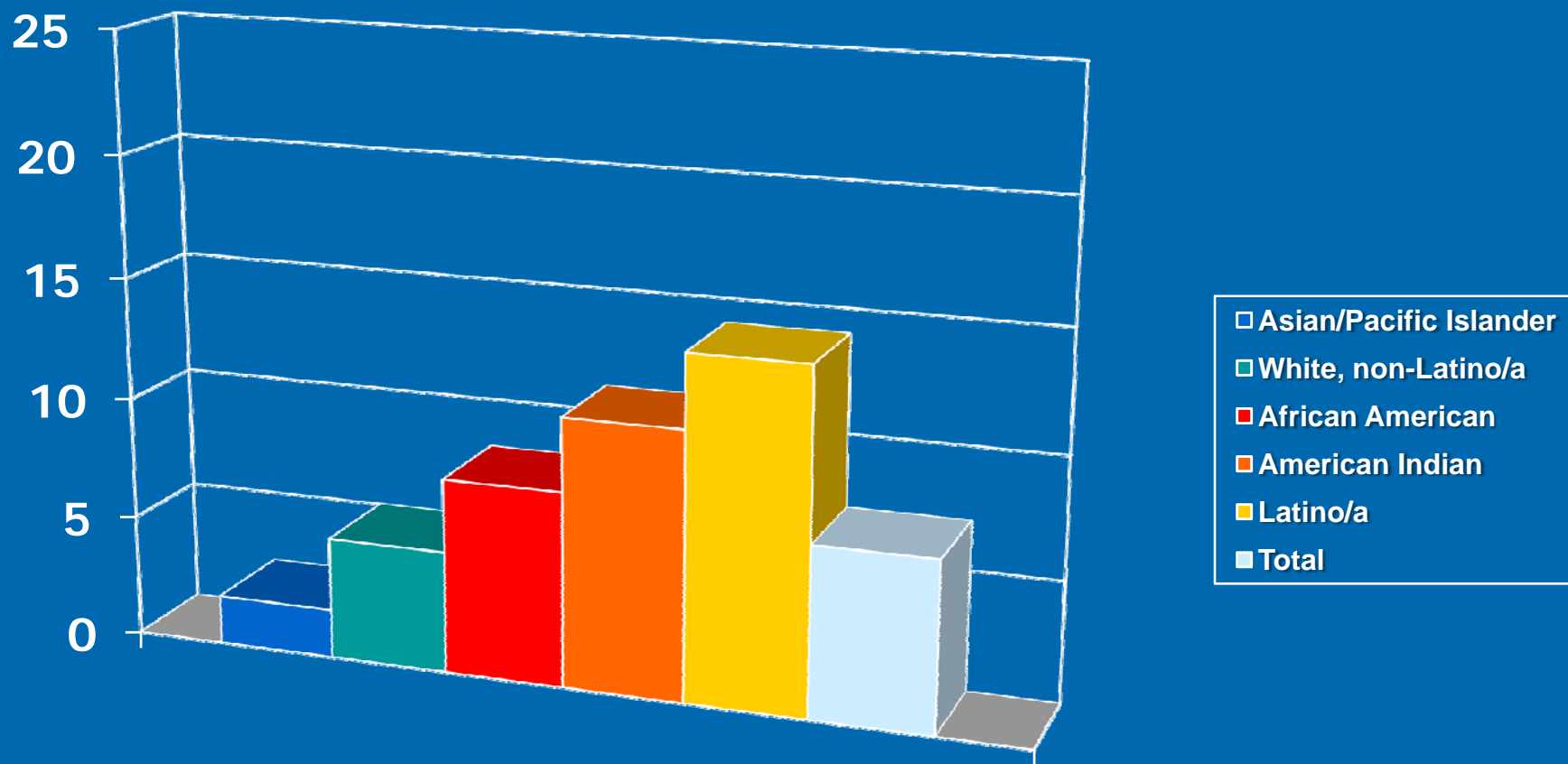
# Children in Poverty, 2007



*Note: Percentage of children under 18 living below the federal poverty level.*

*(Source: Annie E. Casey Foundation, Kids Count Census Data, 2008.)*

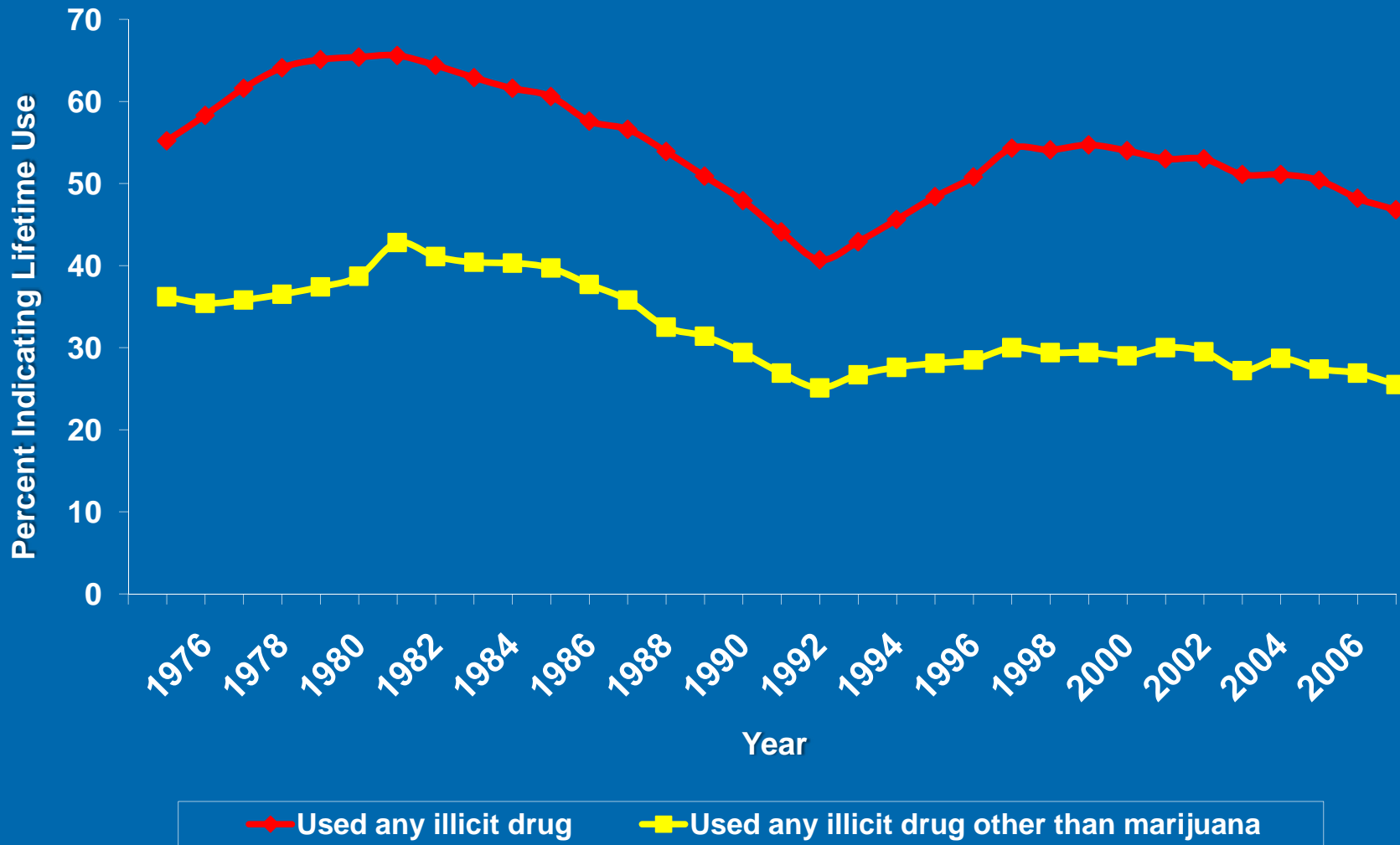
# Trends in Academic Performance and School Behaviors: High School Dropout (Event) Rates by Race and Ethnicity, 2006



*Note: Percentage of 16–19 year-olds who dropped out of school in 2006.*

(Source: Annie E. Casey Foundation, *Kids Count* Census Data.)

# Lifetime Prevalence of Illicit Drug Use by 12th Graders, 1975–2007

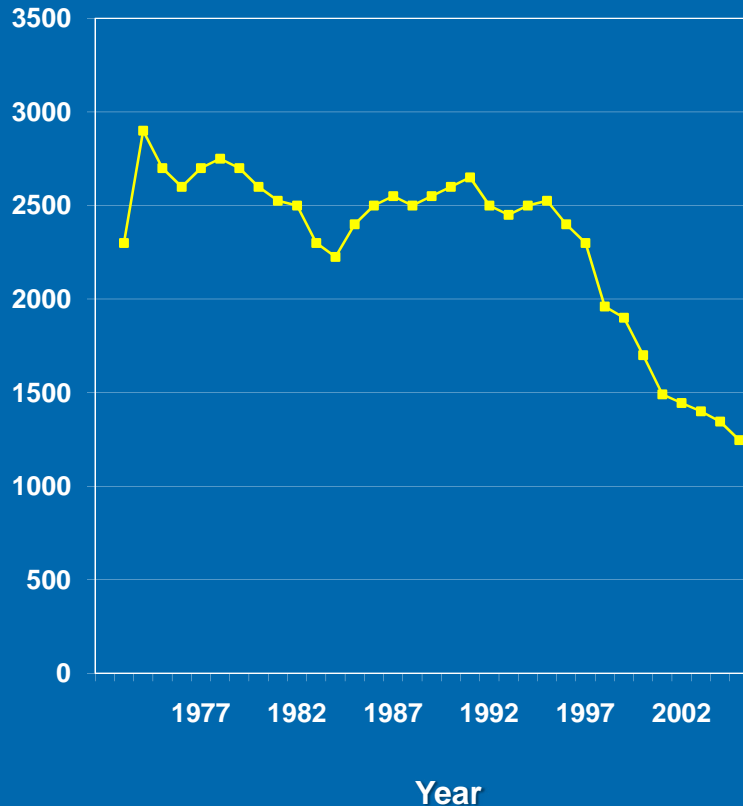


Source: National Institute on Drug Abuse, Monitoring the Future Survey Findings, 2008.

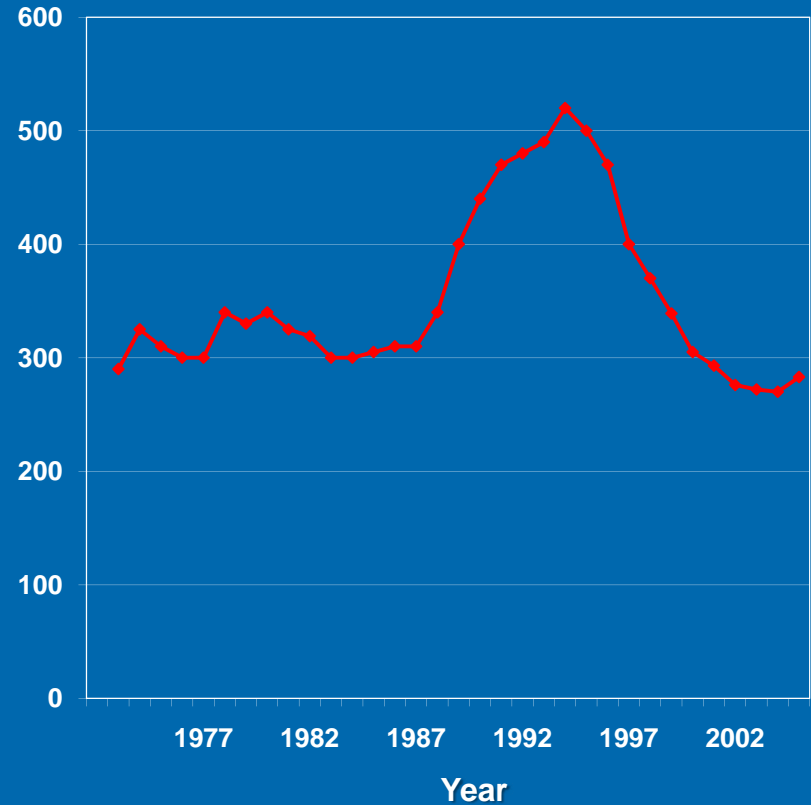


# Juvenile Arrest Rates, 1973–2006

**Juveniles Arrested for Property Crimes, 1973–2006 (per 100,000)**



**Violent Crime Arrest Rates for Juveniles, 1973–2006 (per 100,000)**



Source: National Institute of Justice, Office of Juvenile Justice and Delinquency Prevention, 2008.



# Summary of Recent Trends in Child and Adolescent Problem Behavior

- Rates of problem behavior among children and youth illustrate both challenges and positive trends
  - School **drop-out** rates remain high, particularly among Latino/a and African-American youth
  - **Drug use** declined to a record low in the early 1990s and has since moderated to late 1980s levels
  - Violent and property **crime** decreased significantly between 1995 and 2005; persistent reports of aggression and violence at school have tempered optimism about violent crime
- Variations in etiological factors and in behavior by gender, race, ethnicity, and sexual orientation pose intervention challenges
- Prevention should be a practice and policy priority



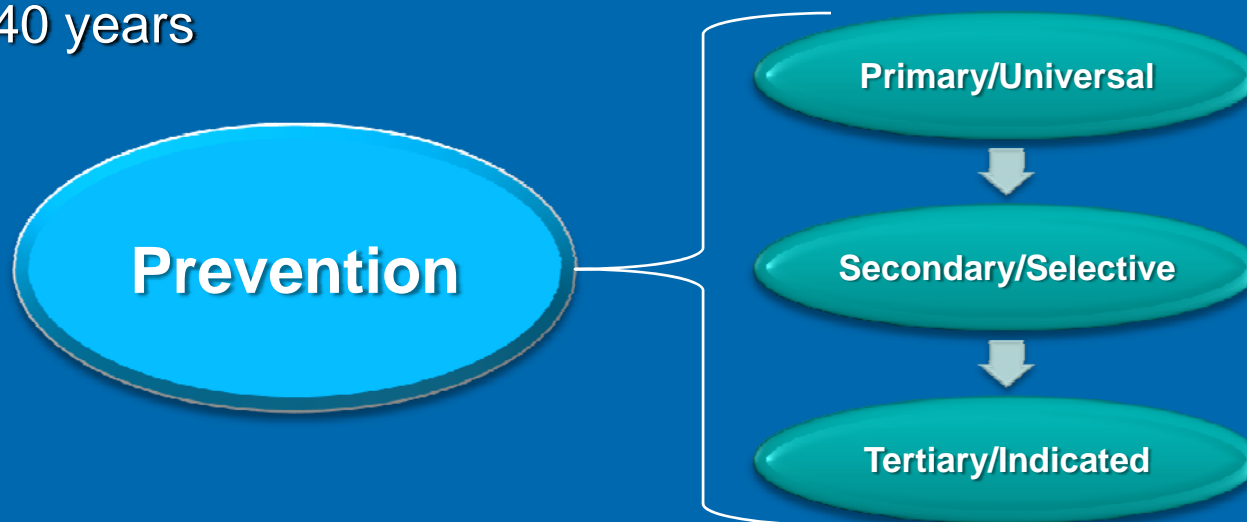
# ***Prevention Science and Adolescent Problem Behavior: Advances and Opportunities***

## **PART II**

### ***Origins and Evolution of Prevention Science***

# School and Community-Based Prevention Approaches, 1960–1980

- School and community prevention efforts have been implemented for the past 40 years



- Information dissemination and fear-arousal approaches were common in the 1960s
- Alternative programs and early forms of affective education surfaced in the 1970s
- These strategies had little or no effect on school, drug use, or delinquent outcomes



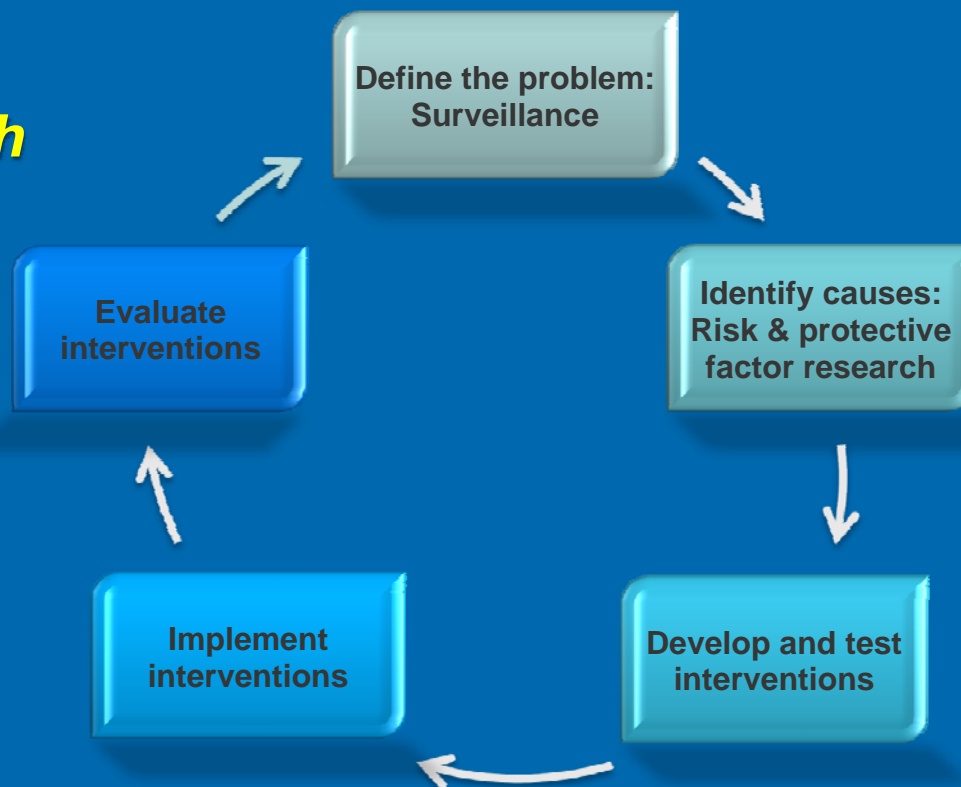
# School and Community-Based Prevention Approaches, 1980–1990

- Poor outcomes from early studies led to new prevention strategies in the 1980s
  - *Social learning* and *cognitive-behavioral* theories were used to develop interactive and skills-based programs
    - Life Skills Training (Botvin, 1984)
    - Seattle Social Development Project (Hawkins & Catalano, 1986)
- Early controlled trials of these approaches revealed significant effects in preventing or delaying the onset of problem behaviors
  - Implementation was limited to funded investigators
- A unifying conceptual model of prevention was still lacking

# School and Community-Based Prevention Approaches, 1990–2000

- A unifying prevention framework came with the adoption of a **public health approach** in the 1990s

## *The Public Health Approach to Prevention*



(Adapted from the Centers for Disease Control and Prevention, <http://www.cdc.gov/>)



# Common Risk Factors for Adolescent Problem Behaviors\*

## ➤ Individual Factors

- Sensation-seeking orientation
- Poor impulse control
- Attention deficits
- Hyperactivity

## ➤ Interpersonal and Social Factors

- Family communication and conflict
- Poor parent–child bonding
- Poor family management practices
- Family alcohol and drug use
- School failure
- Low commitment to school
- Rejection by conforming peer groups
- Association with antisocial peers

## ➤ Environmental Factors

- Norms favorable to antisocial behavior
- Poverty/low economic opportunity
- Neighborhood disorganization
- Low neighborhood attachment



(\*Adapted from Jenson, J.M., & Fraser, M.W. 2006. *Social policy for children and families: A risk and resilience perspective*. Thousand Oaks, CA: Sage.)

# Common Protective Factors for Adolescent Problem Behaviors\*

## ➤ Individual Factors

- Social and problem-solving skills
- Positive attitude
- Temperament
- Low childhood stress

## ➤ Interpersonal and Social Factors

- Attachment to parents
- Caring relationships with siblings
- Low parental conflict
- High levels of commitment to school
- Involvement in conventional activities
- Belief in pro-social norms and values

## ➤ Environmental Factors

- Opportunities for education, employment, and other positive activities
- Caring relationships with adults or extended family members
- Social support from community and non-family members



(\*Adapted from Jenson, J.M., & Fraser, M.W. 2006. *Social policy for children and families: A risk and resilience perspective*. Thousand Oaks, CA: Sage.)

# Public Health to Prevention Science

- The adoption of a public health framework based on risk and protective factors contributed to **a science of prevention** (Coie, et al., 1993)
- Elements of prevention science:
  - Malleable risk and protective factors identified in empirical studies should be the targets of prevention
  - Factors associated with a problem behavior must be changed to prevent that behavior
  - Prevention programs should be rigorously tested
  - Efficacious programs should be replicated and implemented with fidelity in other settings

# Public Health to Prevention Science

- A number of efficacious programs aimed at preventing problem behavior have been identified since 1990
- Some programs are both efficacious and cost effective when compared to alternatives (Aos et al., 2004)
  - Nurse Family Partnership Program (Olds, et al., 2008)
  - Seattle Social Development Project (SDRG, 2006; 2008)
  - Project Northland (Perry, et al., 2008)
- Current challenges:
  - Encourage the practice community to adopt effective programs
  - Increase efforts to develop and test innovative prevention strategies





# ***Prevention Science and Adolescent Problem Behavior: Advances and Opportunities***

## **PART III** ***Lessons from the Field***

***The Youth Matters  
Denver Public Schools Project:  
Preventing Bullying and  
Aggression in Elementary School***

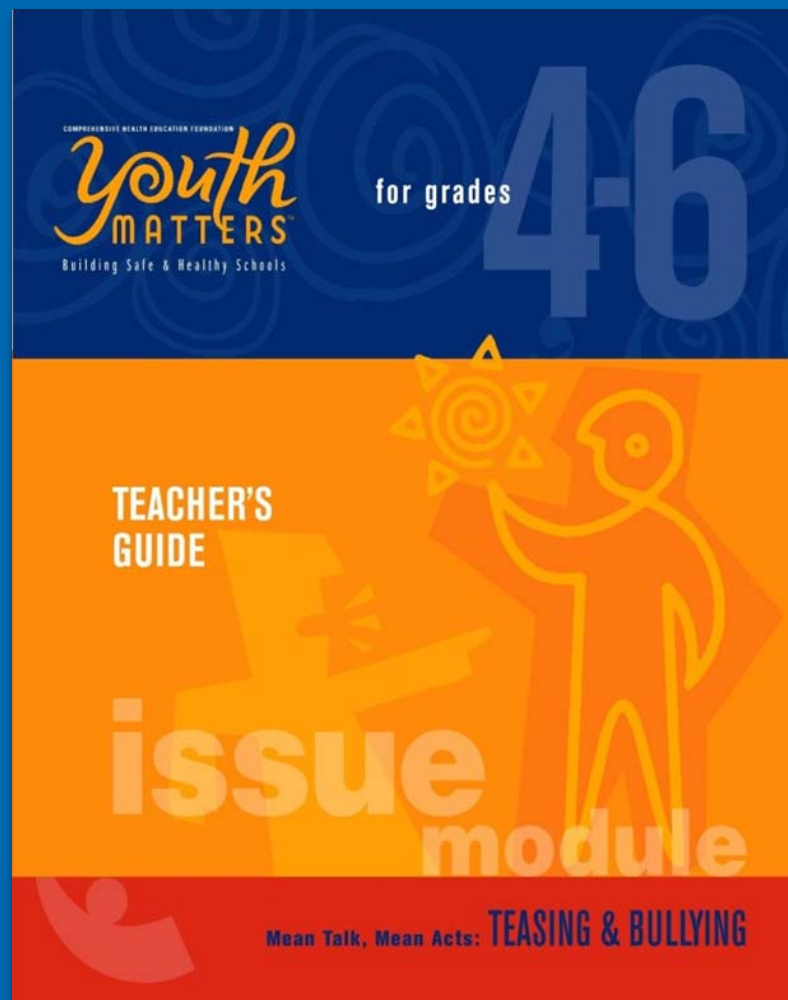
***The Bridge Project:  
An After-School Program for  
High-Risk Children and Youth  
in Public Housing Communities***



# The *Youth Matters* Denver Public Schools Prevention Trial

## Preventing Bullying and Aggression Among Elementary School Students

The *Youth Matters* study is funded by the Comprehensive Health Education Foundation, Seattle, Washington.



# Epidemiology of Bullying

- Bullying is viewed as the intention to physically or emotionally harm another person
  - Direct forms include *name-calling, hitting, kicking, or physical intimidation*
  - Indirect or relational forms include *spreading rumors, ignoring, and ostracizing*
  - The presence of a power imbalance is central to most definitions
- Scholars, teachers, and students have noted the presence of bullying since the 1850s
- Several factors have contributed to a recent interest in bullying
  - European countries have tested national efforts to prevent bullying in schools
  - Bullying experiences are common in the lives of school shooters in the U.S.

# Epidemiology of Bullying

- 25–35% of elementary school students engage in bullying or are victims of bullying
- Girls are more often cited as using indirect or relational bullying; boys are more likely than girls to physically bully others
- Ethnic and racial differences in bullying and victimization reveal no consistent variations or patterns
  - Limited evidence suggests that Latino/a and African-American youth are most likely to report victimization
- GLBT youth report higher rates of victimization than other youth

Sources: Crick & Grotpeter, 1995; D'Augelli, 2002 ; Espelage, et al., 2000; Graham & Juvonen, 2002; Nansel, et al., 2001.

# Epidemiology of Bullying

- **Bullies** typically demonstrate poorer psychological, social, and emotional functioning relative to other groups and are at elevated risk for later aggression and delinquency
- **Victims** report internalizing problems such as low self-esteem and high levels of depression and anxiety
- **Bully-victims** evidence high levels of externalizing and internalizing problems and experience frequent peer relational problems and rejection

# Bullying Prevention Approaches

- Intervention approaches:
  - School-wide strategies
  - Classroom management
  - Peer support
  - Playground aggression reduction
  - Social and emotional skills training
- Anti-bullying curricula are often developed at the local level and have largely unknown effects
  - Most school-based programs, with the exception of the *Olweus Bullying Prevention Program*, have produced little evidence of effectiveness
- We tested the effects of *Youth Matters*, a social and emotional skills-based curriculum aimed at preventing bullying and bully victimization, in 28 Denver elementary schools



# The *Youth Matters* Denver Public Schools Prevention Trial

## ➤ Design

- Random assignment of 28 schools to *Youth Matters* or to a control condition
  - Students in experimental schools received four *Youth Matters* curriculum modules; control subjects received routine educational programs
- Classroom surveys conducted in fall and spring semester of each year

## ➤ Measures and Analyses

- Bullying Other Students and Bully Victim Scales from the *Olweus Revised Bullying Questionnaire*
- Self-reported indicators of antisocial attitudes, antisocial peers, and antisocial behavior
- Multilevel linear growth models were fitted to each study outcome to examine intervention effects

# The Denver Public Schools Trial: Study Design

All public elementary schools  
in urban Denver, Colorado



Schools were stratified by  
risk criteria and geography



Randomly assigned  
28 schools to *Youth Matters*  
or to a no-treatment condition



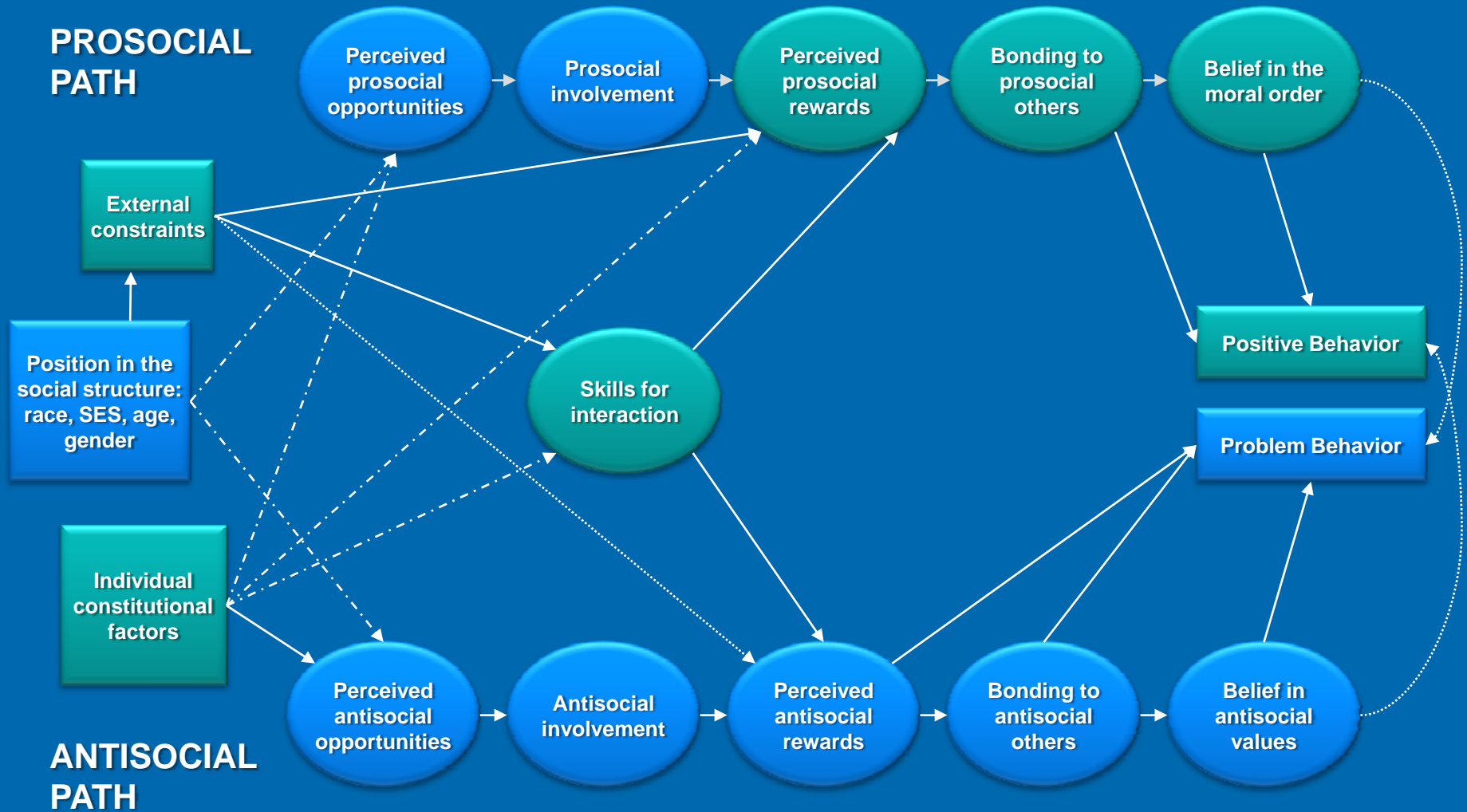
27 classrooms in  
14 control schools

36 classrooms in  
14 experimental schools



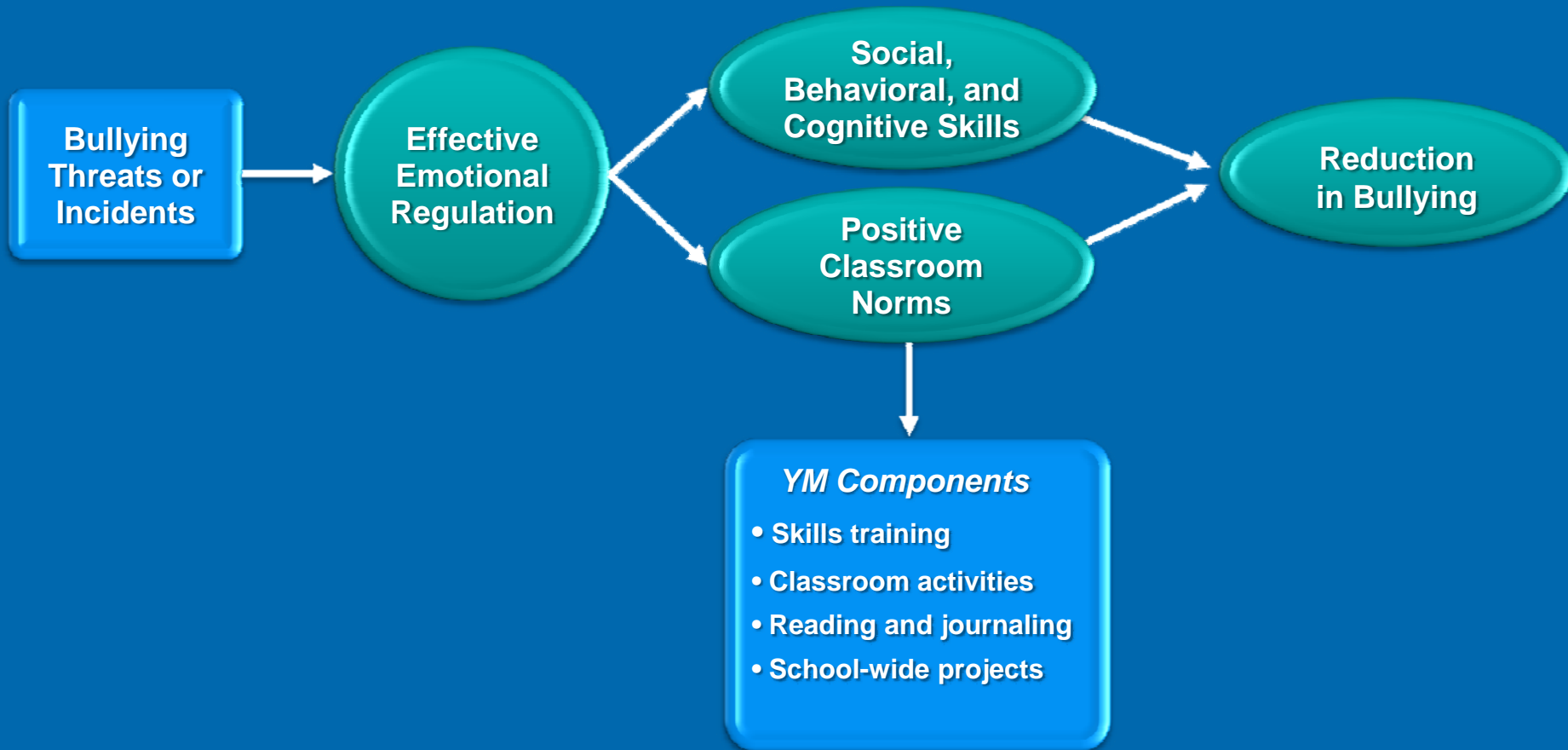
# Theoretical Framework

## The Social Development Model



Source: Catalano & Hawkins, 1996; Hawkins, 2006.

# *Youth Matters* Intervention Model



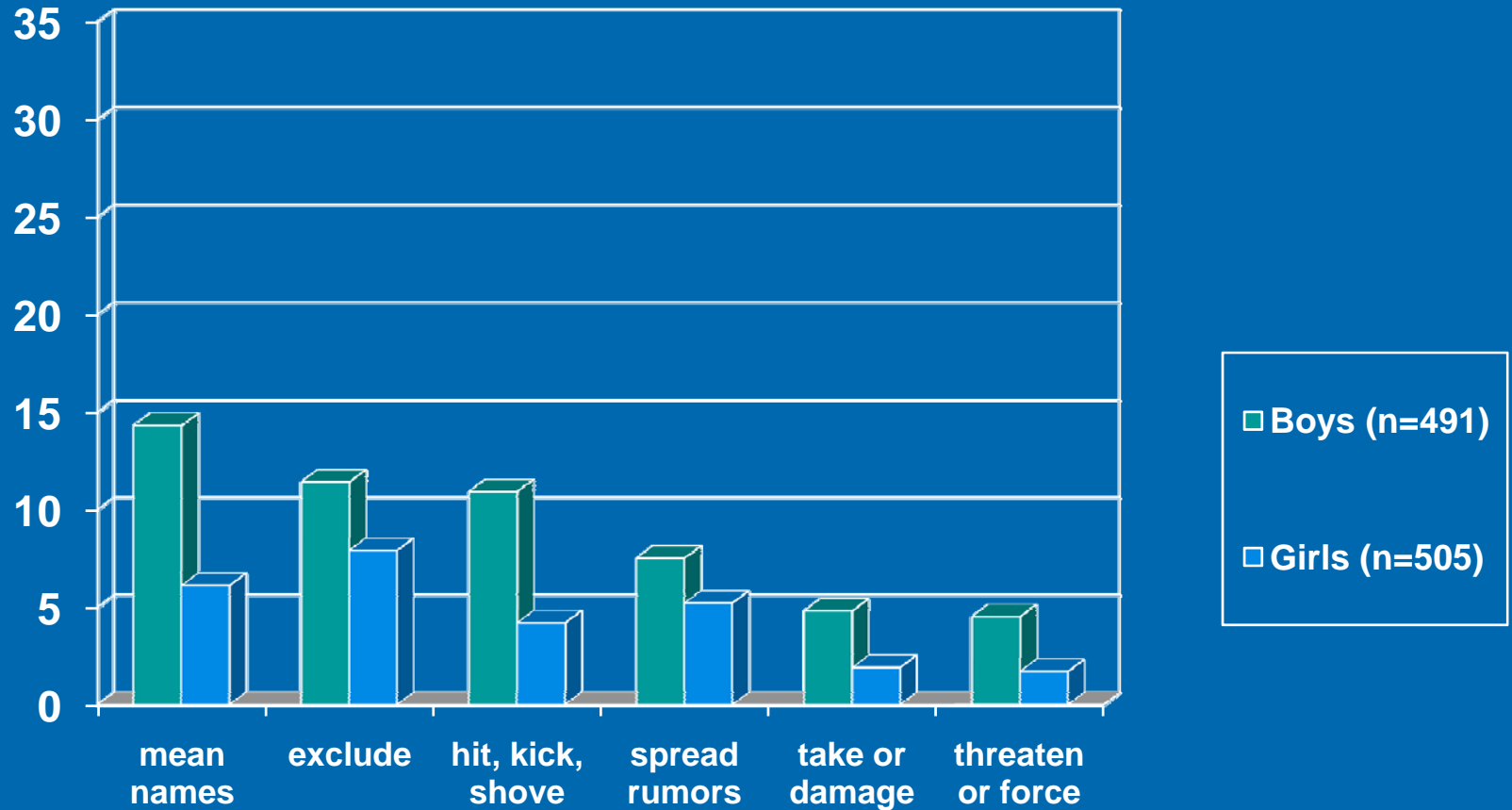
# Baseline Measures

## Demographic Characteristics by Study Condition

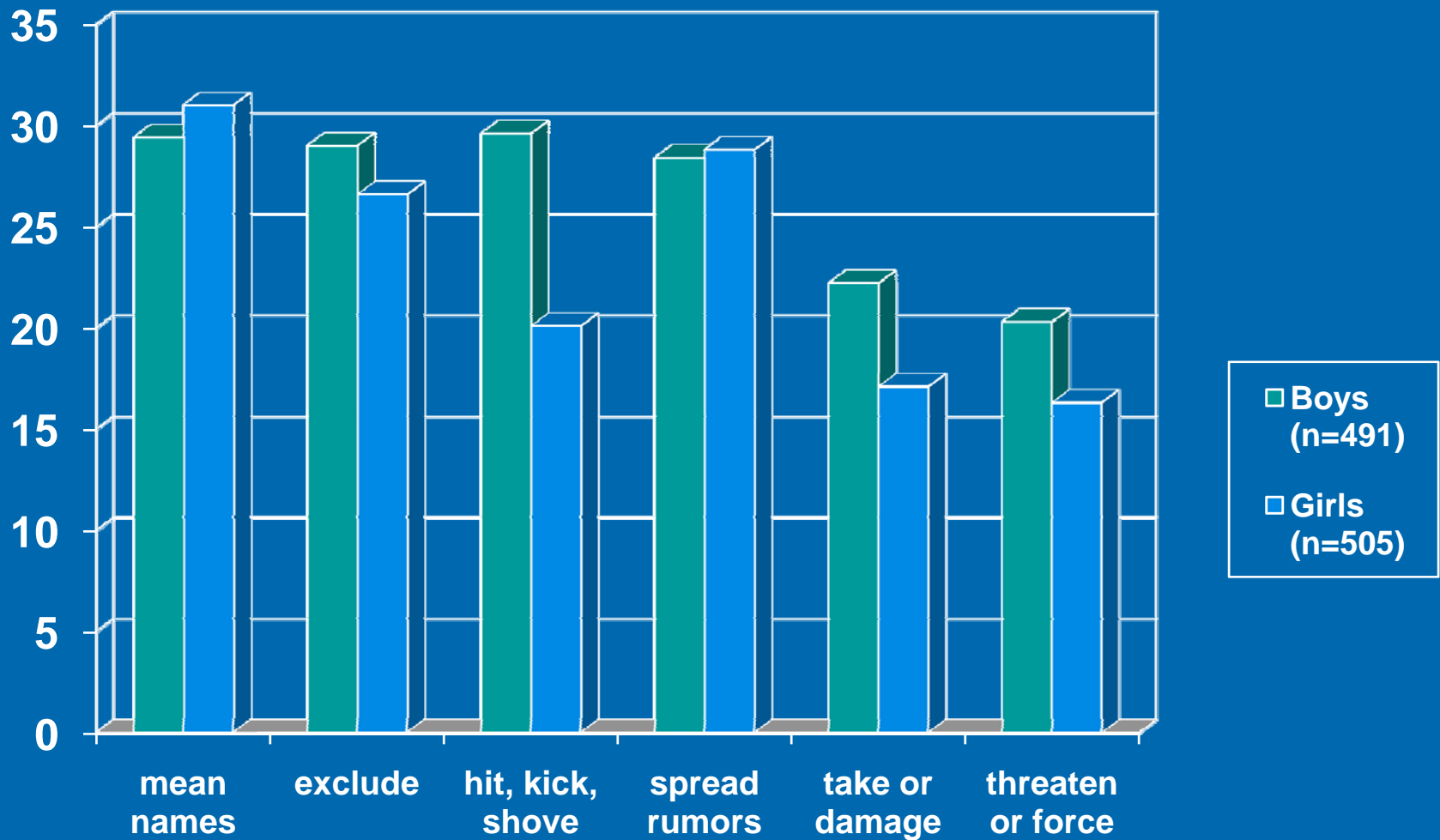
	Controls	YM	Total
Participants ( <i>n</i> )	456	670	1126
Age			
<i>M</i>	9.79	9.84	9.82
<i>SD</i>	.48	.51	.50
Gender (%)			
Female	53.1	49.0	50.6
Ethnicity (%)			
Latino/a	52.9	64.6	59.9
African American	16.7	13.1	14.6
Anglo	11.2	8.2	9.4
American Indian	3.3	3.1	3.2
Asian	3.1	3.1	3.1
Pacific Islander	.0	.4	.3
Other	12.9	7.3	9.6



# Baseline Prevalence Rates of Bullying Other Students



# Baseline Prevalence Rates of Being Bullied by Other Students

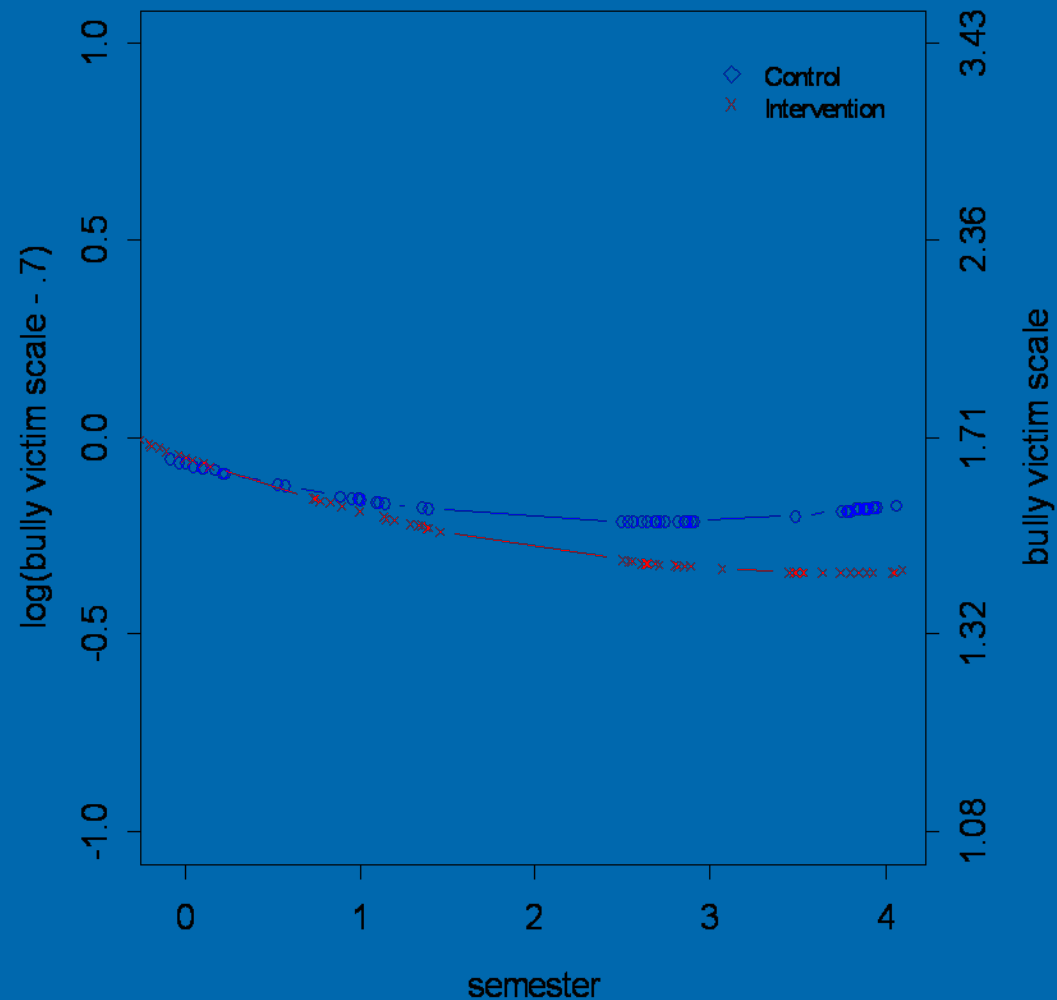


# Selected Intervention Effects

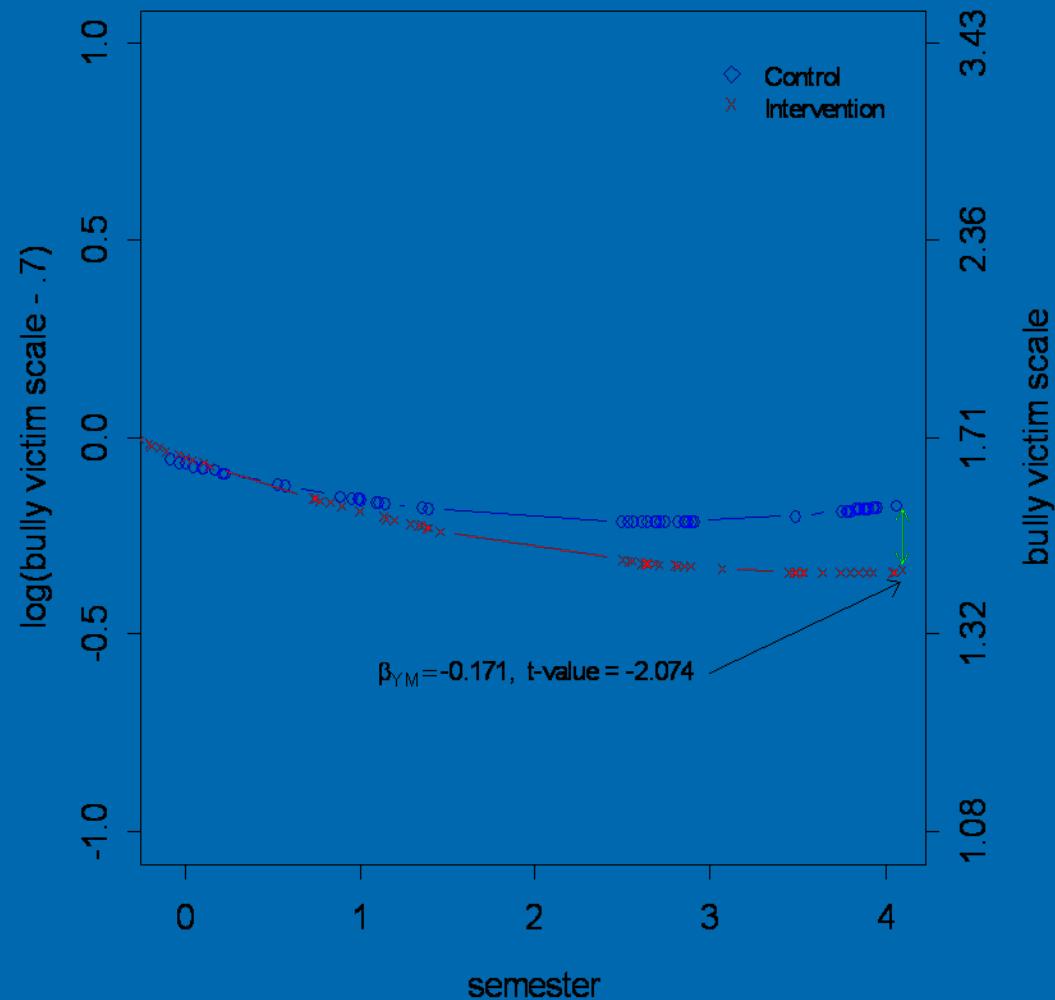


Jenson, J.M., & Dieterich, W.A. (2007). Effects of a skills-based prevention program on bullying and bully victimization among elementary school children. *Prevention Science*, 8, 285-296.

# Bully Victimization: Predicted Curves for Control and Intervention Schools

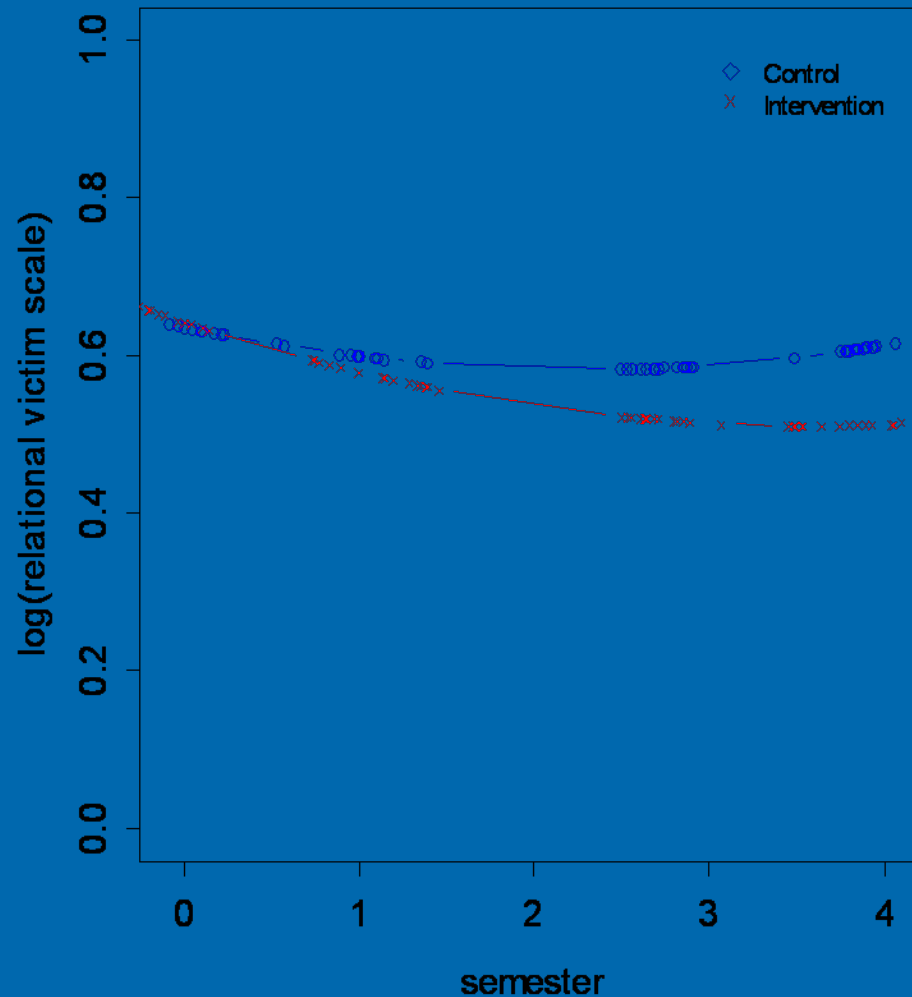


# Bully Victimization: Predicted Curves for Control and Intervention Schools

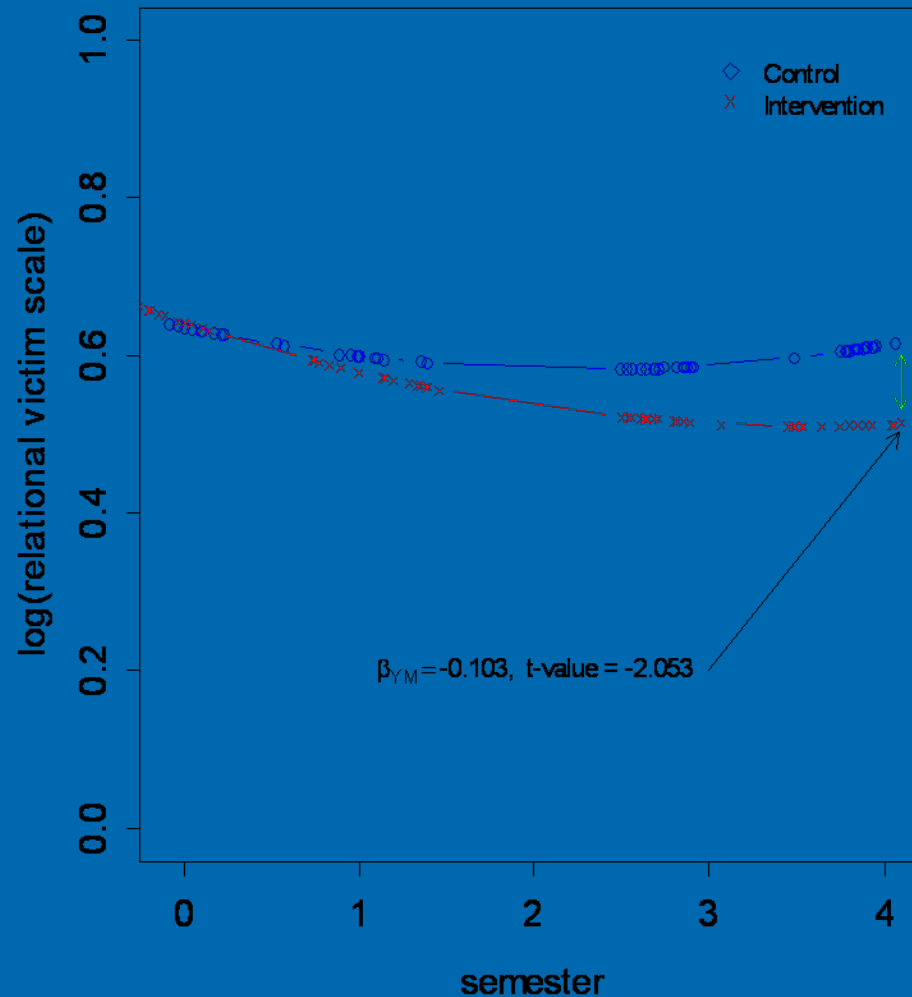




# Relational Victimization: Predicted Curves for Control and Intervention Schools



# Relational Victimization: Predicted Curves for Control and Intervention Schools



## ***Youth Matters***

### **Summary of Findings**

- Findings reveal significant effects on the rate of change for bully victim and relational victim scales
  - Bully and relational victimization decreased by approximately 20% in intervention schools
  - Victimization declined at a significantly faster rate among African-American students
- Reductions in victimization may be consistent with intervention elements that emphasized skill development and empathy

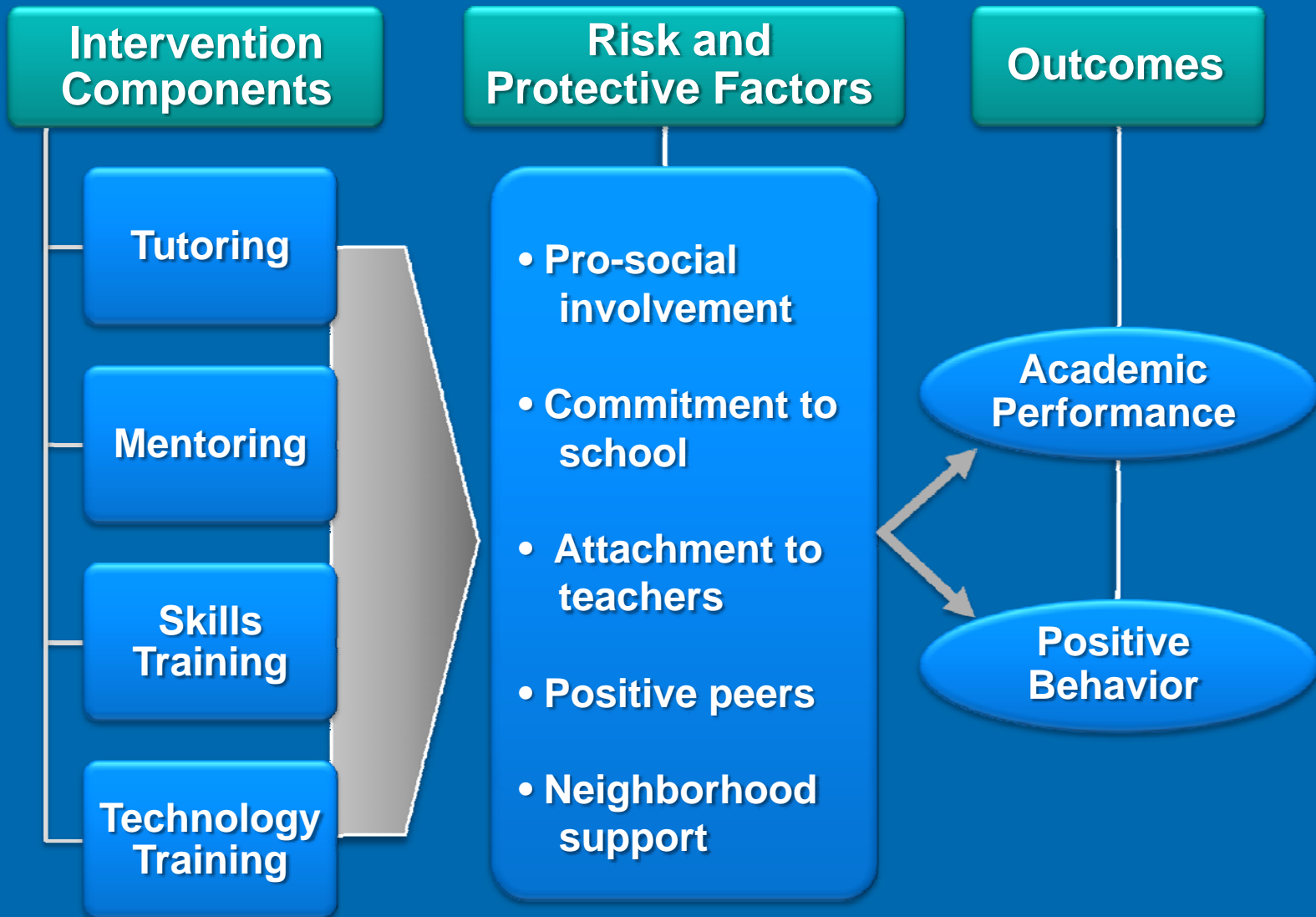
# The *Bridge Project*: An After-School Program for High-Risk Children and Youth



The *Bridge Project* receives support from the Office of Minority Health, Department of Health and Human Services, Washington, D.C.



# The *Bridge Project* Program Model



## ***Bridge Project: Selected Findings***

- Reductions in risk and increases in protection
- Significant increases in reading levels:
  - 74% of youth (N=118) experience at least a one-grade level improvement in reading scores between fall and spring
- Significant gains in academic self-efficacy; levels of self-efficacy are associated with higher academic grades
- Significant improvements in primary subject areas of a statewide standardized test

Source. Anthony, E.A., Alter, C.F., & Jenson, J.M. (2009). Development of a risk and resilience-based out-of-school time program for children and youth. *Social Work*, 54, 45-55.

# Lessons from the Field

- Intervention trials require extensive planning:
  - Site recruitment, preparation, and coordination
  - Funding
  - Development and/or selection of an intervention
  
- Methodological concerns:
  - Design choices
  - Sampling and power
  - Clustering of observations
  - Multilevel analytic strategies
  - Anticipating and handling missing data
  - Human subjects and consent procedures

***Prevention Science  
and Adolescent  
Problem Behavior:  
Advances and  
Opportunities***

**PART IV**

***Advances and  
Opportunities in  
Prevention Science***





# Advances in Prevention Science

- Early ineffective prevention approaches have been replaced with public health models that incorporate knowledge of risk and protection
- Risk and protection models are now part of mainstream prevention activities and have been introduced in social policy discussions
- Efficacy trials demonstrate that problem behaviors can be prevented
  - Investigations such as the *Denver Public Schools* trial provide empirical evidence for the diffusion and implementation of effective programs

# Opportunities in Prevention Science

- Additional research and policy efforts are necessary to advance prevention science:
  - Many schools and communities continue to implement ineffective or non-tested programs
  - Promising programs are not replicated in rigorous trials
  - Program adaptation strategies addressing gender, cultural, sexual orientation, and other differences receive little attention

# Opportunities in Prevention Science

- Mechanisms to translate results from efficacy trials and effectiveness studies to community prevention systems are needed:
  - *Communities That Care* (Hawkins & Catalano, 1992)
  - *Community Youth Development Study* (Hawkins et al., 2008)
  - ***PRO**moting School–Community–University Partnerships to Enhance **R**esilience [PROSPER]* (Spoth, Greenburg et al. 2008)
- The promising work generated by prevention scientists should be extended to public policy directives
  - The US lacks a **national strategy** to advance prevention practice and policy

# Social Work and Prevention Science

- Increase intervention research by social work investigators
- Expand prevention content in social work education
- Emphasize elements of prevention science in doctoral research training
  - Expand post-doctoral opportunities in prevention science
- Increase social work presence in groups such as the *Society for Prevention Research* <http://www.preventionscience.org/>



# Acknowledgments

- The *Youth Matters* study is funded by grants from the Comprehensive Health Education Foundation, Seattle, Washington.
- The *Bridge Project* receives support from the Office of Minority Health, Department of Health and Human Services, Washington, D.C.

For more information about these projects, contact:

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